

# Henderson-Hasselbalch equation

The Henderson and Hasselbalch equation describes the relationship between buffer composition and its acidity. Under simplifying assumptions:

$$\text{pH} = \text{p}K_A + \log \frac{c_B}{c_A},$$

where

pH is the resulting pH of the buffer,

pK<sub>A</sub> is the dissociation constant of the conjugate acid of the buffer,

*c<sub>A</sub>* and *c<sub>B</sub>* are the equilibrium concentrations of the conjugate acid and base forming the buffer.

## Links

### Related articles

- Derivation of the Henderson-Hasselbalch equation and other details.